

Natural Heritage & Endangered Species Program Division of Fisheries & Wildlife Route 135 Westborough, MA 01581 (508)792-7270, ext. 200

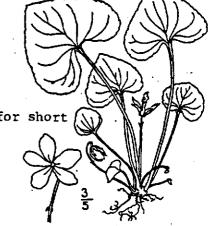
# MASSACHUSETTS RARE AND ENDANGERED PLANTS

NORTHERN BOG VIOLET

(Viola nephrophylla Greene)

#### DESCRIPTION

Northern Bog Violet is a stemless blue violet (leafstalks and flowerstalks all arise from a single point at the soil surface). It is nearly or quite glabrous (smooth), except for short hairs on upper leaf surface. Earliest leaves are kidney shaped, later leaves are broadly heart shaped, becoming 1-2.5" (2-6cm.) long. Flowers are large and violet-blue. The three lower petals are bearded and the two upper petals often have scattered hairs. Self-fertilizing flowers are ovoid, with green glabrous capsulses. Petal flowers are produced from mid-May to early-June; self-fertilizing flowers are produced from mid-June into August.



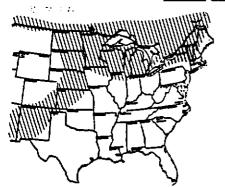
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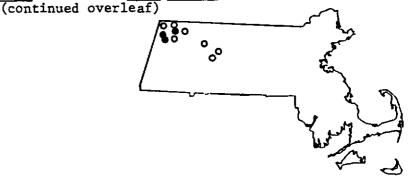
#### SIMILAR SPECIES IN MASSACHUSETTS

Northern Blue Violet (V. septentrionalis) is very similar but leafstalks and flower-stalks are usually short-hairy. Leaves are less broadly cordate, more pointed, and much larger than those of Northern Bog Violet and the leaf blades are short-hairy beneath. Marsh Blue Violet (V. tucullata) is entirely glabrous (may have some hairs on leaf upper surface), has heart-shaped leaves, pale blue flowers on very long stalks, and inhabits swamps and shaded brooksides. The hairs on the insides of the petals are gradually thickened toward the tip, unlike other violets.

#### HABITAT IN MASSACHUSETTS

Northern Bog Violet inhabits riverside rock ledges and banks, rocky rich woods and out onto adjacent open roadsides and ditches. This plant seems to be intolerant of deep shade, preferring semi-open to open habitats. It is usually found at middle to upper elevations, in wet to mesic conditions. Species found incassociation with Northern Bog Violet include Viola canadensis (Canada Violet), Viola selkirkii (Great-spurred Violet), Tsuga canadensis (Hemlock), Acer rubrum (Red Maple), and Alnus





Verified since 1978OReported prior to 1978

Distribution of Northern Bog Violet

Distribution in Massachusetts by Town

#### NORTHERN BOG VIOLET (continued)

rugosa (Speckled Alder).

## RANGE

One of the most widespread of North American violets, Northern Bog Violet ranges from Prince Edward Island and New Brunswick to British Columbia, south to northern and western New England, Wisconsin, northern Iowa, and in the mountains to New Mexico, Arizona, and southern California.

### POPULATION STATUS

Northern Bog Violet is considered "Threatened" in Massachusetts. Currently, 1978 to present, only 3 occurrences have been verified; historically 8 other occurrences have been recorded. The reasons for its limited occurrence in the state are not known at this time.